13 Core Questions
for all Marine Recreation Providers

1. Does your company abide by all local, regional, national and international environmental laws and regulations?

Please list actions taken to support and educate customers about local, regional, national and international environmental laws and regulations:

Social Dilemma:

- Fishing provides income, but removal of key biological species can destroy the ecosystem and the reasons for tourists coming to fish.
- Disposing wastes at sea saves money, but improper disposal of wastes in coral reef waters can destroy the reef's ecosystem.
- Selling reef fish, urchins, shells and other reef animals as ornamental objects or food makes money, but is leading to worldwide coral reef destruction.
- Pelagic fishing is lucrative, but over harvest of pelagic species leads to ecosystem decline and diminishes food resources for local communities.

Good Practice:

- Marine recreation providers can support healthy reefs by abiding by all environmental laws pertaining to toxic and human waste disposal
- Not harvesting resources to sell as ornamental objects
- Not serving threatened or endangered species as cuisine.
- Boat crews can educate tourists about relevant laws governing fish harvesting and consumption in a given region and ensure that all recreational excursions and fishing trips comply with these laws.

2. Does your company provide trainings, briefings or literature for employees and tourists regarding good environmental practices for snorkeling, diving, kayaking, various types of boat tours and other marine recreation activities?

Please list actions taken to provide environmental education for employees and tourists:

Social Dilemma:

- Many impacts to coral reefs and other marine environments are caused by a lack of knowledge and understanding of the marine environment by marine recreation providers and tourists.

Good Practice:

- Marine recreation providers can supply training manuals for employees and onboard literature and briefings for tourists that address relevant environmental

issues and highlight marine recreation practices that minimize impacts to coral reefs and other marine environments.

3. Does your company provide information for employees and tourists regarding the potential impacts of motorized vessels and poor boating practices on coral reefs and other marine environments?

Please list actions taken to provide information on the potential impacts of motorized vessels and poor boating practices to employees and tourists:

Social Dilemma:

- Being a tourist boat operator provides a living, but poorly conducted or irresponsible boating practices, such as operating in shallow water environments, can increase sedimentation as a result of propeller wash and wave creation. This disruption can cause severe damage to coral reefs, sea grasses, mangroves and other marine environments.

Good Practice:

- In order to minimize boating impacts to coral reefs and other marine environments, operators should follow proper navigation and mooring principles,
- avoid fast motoring in shallow reef areas, and
- educate tourists who rent boats about relevant environmental issues and good boating practices.

4. Does your company actively use, and support the use of, mooring buoys as an alternative to anchoring around coral reef ecosystems?

Please list actions taken to actively use, and support the use of, mooring buoys:

Social Dilemma:

- Anchors are convenient, but if used improperly, anchors and the long chains associated with them can cause severe damage to coral reef ecosystems.

Good Practice:

- Marine recreation providers can significantly reduce anchor damage through the use and support of a mooring buoy program at popular coral reef sites.
- Companies that rent boats can provide information to tourists on basic seamanship, navigation and location of mooring buoys in coastal regions (information about the damage that anchors can cause to coral reefs) and a waterproof map of the location of mooring buoys at popular snorkel and dive sites.
- Rent boats can encourage drift dives, where no anchor is dropped, when a mooring buoy is not available at a particular site.

5. Does your company have an environmental code of conduct to guide the actions of motorized and non- motorized boat operators and tour guides when they come into contact with, or viewing distance of, marine wildlife such as turtles, manatees, dolphins and whales?

Please list actions taken to abide by the environmental code of conduct:

Social Dilemma:

- Tourists will pay to see marine wildlife, such as turtles, dolphins and whales, but their life cycles can be easily disturbed if not viewed properly. These disturbances can affect mother/calf pairs, resting periods and use of feeding and breeding grounds.

Good Practice:

- The most appropriate way to view marine mammals is at a slow speed from a distance that does not change or alter the animals' behavior. Avoid approaching animals head-on and never chase the animals. One-hundred meters is a commonly agreed upon minimum distance for watching large whales.

6. Does your company take actions to prevent accidental discharge of toxic substances or other waste into the environment?

Please list actions taken and methods and procedures used to prevent accidental discharge of toxic substances or other waste into the environment:

Social Dilemma:

- Hazardous materials such as fuels and oils can threaten the health of coral reefs and other marine environments, but are inherent in boat operations.
- It is expensive, and if not urgent, doing maintenance yourself, or putting it off as long as possible, can save money, but, that can lead to accidental or unintentional discharge of toxic chemicals into the marine environment.

Good Practice:

- Regular boat maintenance and record keeping, particularly regarding engines, fuel tanks and other potential leakage areas, can significantly reduce the amount of pollutants a boat discharges into the marine environment.

7. Has your company taken actions to reduce use and ensure proper disposal of toxic antifouling bottom paints, fuels, cleaning agents and other hazardous materials?

Please list actions taken and methods used to reduce the use of toxic paints and chemicals and ensure the proper disposal of wastes while operating at sea or during drydock operations:

Social Dilemma:

- Antifouling bottom paints are useful, but contain known carcinogens and heavy metals and threaten the health of both coral reefs and people who eat seafood.

- Operating boats involve many hazardous materials that are time-consuming and expensive to properly contain and disposed of, but if released deliberately or unintentionally, can really harm the marine plants and animals.

Good Practice:

- Use antifouling bottom paints that are produced from biodegradable products and significantly less toxic than paints of the past.
- Replace other onboard chemicals with alternative environmentally friendly and biodegradable products
- Ensure that all hazardous materials associated with at-sea operations or drydock repairs are disposed of in a proper manner.

8. If applicable, does your company use alternative, clean-burning technology such as four-stroke outboards for smaller boats or biodiesel fuel for larger vessels with in-board propulsion systems?

Please list actions taken or future plans to use alternative, clean-burning technology:

Social Dilemma:

- It is not always practical to replace older gasoline boat engines that are inefficient and pollute, releasing as much as 30 percent of consumed fuel unburned into the marine environment.

Good Practice:

- Replacement of older, less fuel-efficient models with new designs significantly reduces pollution in the marine environment.
- For inboard engines, retrofitting for use of biodiesel as an alternative fuel source can significantly reduce toxic discharge into the marine environment.

9. Does your company take steps to minimize discharge of untreated sewage and wastewater from boats?

Please list actions taken and methods used to minimize discharge of untreated sewage and wastewater:

Social Dilemma:

- It is expensive to build effective septic systems or repair old ones, but raw or partially treated sewage in coastal waters poses a health threat to coral reefs, marine animals, and people.

Good Practice:

- Disposal of sewage at pump-out facilities on land is the best way to minimize impacts to the marine environment.
- If pump-out facilities are not available, boats should treat sewage mechanically and with nontoxic, biodegradable chemicals to reduce solids and pathogens.

- Boats should proceed as far as possible offshore before pumping out to prevent the pollution of bottom sediments, coral reefs and coastal waters.
- Alternatively, boats can use self-contained toilets, which can be removed from vessels and dumped at onshore facilities.

10. Does your company take actions to prevent the introduction of garbage or solid waste into the marine environment?

Please list actions taken to prevent the introduction of garbage or solid waste into the marine environment:

Social Dilemma:

- It's expedient, but when individuals throw garbage into the environment, it creates a mess.
- It is convenient to just throw plastic, fishing line, cigarette butts, and Styrofoam into the ocean, which seems to big, and like it won't matter, but they cause the death of millions of turtles, seabirds, fish, and marine mammals that eat or get caught in them every year.

Good Practice:

- Garbage bins on tour boats can be contained or kept inside to minimize the chance of debris blowing overboard.
- Replace plastic and Styrofoam by more biodegradable material, such as paper.

11. Does your company support good environmental practices to avoid catching and serving rare, threatened or endangered marine species for seafood consumption?

Please list the actions taken to avoid catching and serving rare, threatened or endangered species:

Social Dilemma:

- It is very lucrative to help tourists catch popular game fish, but their populations are plummeting and have been listed as endangered or threatened (groupers, jewfish, jacks, marlin, tuna, snappers, lobsters and crabs, etc.).
- It does not seem like one person can make a difference, but over fishing is removing key predators and herbivores from the marine environment.
- Everyone has the right to make a living, but over fishing directly threatens the health of coral reefs and other marine environments worldwide.

Good Practice:

- Not harvesting rare, threatened or endangered marine species to serve as seafood.
- Practicing catch-and-release programs.

- Educating tourists about which species in a given region are rare, threatened or endangered, and thus should be avoided.

12. Does your company support good environmental practices and educate customers about the negative environmental impacts of harvesting marine species from coral reefs and other marine environments to sell as ornamental souvenirs?

Please list actions taken to support good environmental practices and educate customers about the potential negative impacts of ornamental souvenir collection:

Social Dilemma:

- Selling souvenirs provides income, but removal of key biological components in reefs and marine environments damages ecosystem health.
- Over harvesting of reef fish, urchins, shells, etc., for souvenirs is contributing to the decline of coral reefs and other marine environments around the world.

Good Practice:

- Marine recreation providers can support healthy coral reefs and other marine environments by not harvesting marine species to sell as ornamental objects.
- Boat crews can educate tourists about the damaging effects of collecting marine species as souvenirs.

13. Does your company contribute to biodiversity protection and conservation projects in the local region of its operations?

Please list the actions taken to protect and conserve biodiversity in your local region:

Social Dilemma:

- They are not problems that one individual can solve, but environmental degradation and loss of biodiversity are affecting all regions of the world.
- You do not have to contribute, but local, regional and international conservation projects are working to protect terrestrial (land) and marine ecosystems, and regularly need support through funding, volunteers and other resources.

Good Practice:

- Contribute financial, in-kind or material support to local and regional projects.
- Contribute to local coral and other marine parks in which marine recreation providers operate.
- Lobby government agencies to support environmental legislation, participate in local or regional environmental planning, and encourage tourists to make financial contributions to local conservation projects.

Source: *Managing Environmental Impacts in the Marine Recreation Sector: Self-Assessment Checklist.* Available from the Center for Environmental Leadership in Business at www.celb.org, www.toinitiative.org and www.coral.org.